ABSTRACT

Structure of the stem of LED Chip Unit bulb

The present invention is related to a new structure of the stem of LED Chip Unit bulb, which comprises a cup disk, a chip, a stand, a molybdenum alloy wire and a stem. Essentially, the brace-end of the stem is connected to a supportive chip cup disk. The center of the disk is concave so as to form a holding chamber whose inner diameter is open, arc-shaped and circular. The molybdenum alloy wire is tapered off to a point and thus it takes a turn of 180°, hooking and pressing against the chip. Given the elastic coefficient of the barb-turning angle, the tip of the molybdenum alloy wire may point-press against the chip in a normal state in response to the temperature-dependent expansion-contraction feature of the chip. The gradient of the arc-shaped, circular wall of the disk enables the chip to generate light that refracts at different angles, giving rise to a wide-angle, open, homogeneous light source. The vacuum inside the bulb facilitates efficient circulation and therefore heat absorption. As a result, despite the heat dissipation of the chip, the temperature of the bulb does not increase, prolonging the life of the bulb. Hence, the new structure of the stem of LED chip unit bulb does have a practical utility.